# Dr.M.Rammohan,

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• Coimbatore India

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Vice Principal/Head/Professor Cheran College of Pharmacy/Cheran Group of Institutions Coimbatore-641010.

# SEDUCATION:

- M.Sc.,
- M.Phil.,
- Ph.D.,Bio-Technology



28 Years (Teaching and Research).

# $\overline{\Box}$ **RESEARCH EXPERIENCE** :

11 Years.

## ☆ TEACHING EXPERIENCE :

17 Years.

# **G** FOREIGN RESEARCH EXPERIENCE :

4 years-National Cancer Centre- Singapore.

## **ACADEMIC AND RESEARCH PROFICIENCY :**

- 1. IQAC Cell Director/Coordinator
- 2. NAAC Accreditations Documentation
- 3. Value added Courses
- 4. Industrial/Institutes Collaborations' regarding the students Placements and Internship projects.
- 5. Industrial Visit for extending students identified Jobs
- 6. Conducting Seminars/Workshops/National/International Conference
- 7. Identifying student personal skill and unveiling their ambition
- 8. MOU with National/International for Students projects and placements

9. Monthly twice a meeting with Faculty Development Programme to improve and monitoring the standard Quality of Each and Every Department.

10. Monitoring and document submission from Antiragging Committee to maintain the standard quality of each and Every student quality of life within the Campus of your Institution.

11. Conducting orientation program for Faculty Publication- Scopus and Hi- Indexed Journals

12. Based on the Faculty specialization, guide them for writing Research grants.

13. Monthly once meeting with Faculty, Updating for the Modern development technology for Students and Institutional Progress Academic and Research aspects.

- 14. Conduct the students Orientation Program.
- 15. Incubation center Startup for Institutional Progress.

## **PRESEARCH PROJECT ACCOMPLISHMENTS :**

Foreign/Abroad: 4 Years. (Feb, 2002-Jan, 2006) Department of Cellular and Molecular Research division Department of Clinical Pharmacology & Pharmacogenomics National Cancer Center, Singapore.

University Experience: 7 Years. (Dec, 1994 - Jan, 2002) Genetic Engineering Research Unit, School of Biotechnology, Madurai Kamaraj university, Madurai. Tamilnadu, India.

## PROJECTS HANDLED :

Nano vaccine Development for Rabies using with latest Nano Technology. Budget value: 1.8 Crore. Project submitted to DBT (Funding Agency) India.

1. Taq Polymerase Extraction and Purification. Culture the Bacteria E. coli with cloned DNA of Taq Polymerase. Large scale culture of E. coli with 100 Lit Fermenter. All additive Reagents with Bo2 dissolved and maintained. Harvesting and culture the bacteria centrifuge them, Break the bacterial cell with French Press Enzyme was collected and purified using by Sephadex G - 25 Column chromatography.

Filtrate was collected and Size of the Protein Band found using by SDS- PAGE and found the Band with Coomassie blue staining method. Aliquot was separated by column chromatography.

Taq polymerase of 0.25 units of PCR was performed with the purified Taq Polymerase as well activity of the Enzyme compared with GIBCO BRL Company. Project Purified Enzyme was Very Good activity and the PCR amplicon was successful.

2. Expertise in DNA sequencing method - Sangers dye de-Oxy chain termination method. Handled S35, P32Radioactive materials were incorporated with orderly arranged DNA fragment of nucleotides and result was obtained finally by Autoradiogram (X-Ray Film). Read the DNA sequence A, C, G, T and analyzed by basic Bioinformatics tools for the further confirmation of the result.

3. Cancer Gene Therapy-Aurora kinase mitotic spindle regulator protein analysed in Cell cycle pathway of different cancer cell lines (Animal tissue culture).

Hela, Hep3b, Hepg-2, Cn2, Sw480, Mcf-7, Mcf-10, K562 and Human Fibro blasts Cell lines.

Expertise in Molecular techniques were employed to find out the activity of Aurora Kinase-DNA Extracted from the different Cancer cell types followed with the PCR, Southern-hybridization, Northern blot, Protein Extraction and Western Blot. CDNA was synthesized from RNA transcripts of different cancer cell lines were achieved.

FACS analysis was carried out in different cancer cells about DNA replication and synthesis of DNA was found. Site Directed Mutagenesis performed to found the Mitotic spindle regulator of Aurora Kinases.

4. Pharmacogenomics – Personalized Medicine (Drug and DNA interaction).

Metabolizing enzyme CYT P450 exons and SNPs were found from Different Cancer patients of Breast cancer Individuals for the Efficacy of Tamoxifen (Taxol).

Different Populations of Genes were analyzed in Chinese, Malay and Singapore Indians. Designing the Primer for all exons of CYT P450 using by Bio informatics tools were designed and followed by PCR and DNA sequencing using automated DNA sequences.

MOUS successfully completed both National and International.

#### **COLLABORATION:**

1. INTERNATIONAL COLLABORATION Division of Clinical Pharmacology and Pharmacogenetic studies National Cancer Center, Singapore.

2. NATIONAL COLLABORATION. Analysis of Cancer Clinical Samples at Genome Level. Dr.K. Velavan M.D, Erode Cancer Hospital, Erode.

3. Pasture Institute Government of India, Coonoor, Tamilnadu, Joint Proposal for Nano Rabies Vaccine development.

Exchange Program for Students and Faculty exchange programm ..

Guided - Medical Projects for the Pharm.D and B.Pharm Students. More than 75 Projects accomplished.

International and National Seminars Organized more t han 50 numbers.

International and National Papers published in High Impact factor.

External Examiner for Ph.D., VIIVA VOCE EXAM and PG programs. Invited as a Resource person to deliver at the National Seminar and conducted the workshop in Modern Technology.

**Research Center Establishment** 

Cancer Genomics studies to promote the Gene Therapy . Drug and DNA Interaction- Studies. Pharmacogenomics Laboratory – Personalized Medicine.

**Techniques Expertise:** 

Tissue Culture Techniques-Invitro Studies-Human Cell Culture -Trypsinization Subculturing of cells, Cryopreservation and MTT Assay.

DRUG -DNA interaction- Tamoxifen and Cytochrome p450(Drug Metabolizing Enzyme) Personalized Medicine-Pharmacogenomics.

Protein separation-PAGE electrophoresis-Column Chromatography-Sephadex Gel Filtration-ionic Gradient, Western Blot, Southern Blot & Northern Blot

Genomics: DNA, RNA Extraction from Human Blood & Mouthwash Samples, PCR-Normal PCR & Gradient PCR.DNA-Sequencing – Manual & Automated Sequencer-SDM-Directed Mutagenesis. Isolation and Characterization of Bacteria from the samples.16S rDNA Sequencing Phylogenetic Tree Analysis. Plasmid Separation.

Site directed Mutagenesis Elisa and FACS.

Teaching Experience: 17 years

Reputed University and Institutions- served

1. National Cancer Center, Singapore. Affiliation - National university of Singapore.

2. Genetic Engineering Research unit, School of Biotechnology, Madurai Kamaraj University, Madurai.

3. School of Biotechnology, Bharathidasan University, Tiruchirappalli.

- 4. New Horizon College of Engineering, Bangalore
- 5. Hindustan College Coimbatore.
- 6. Vivekanandha College Tiruchengode
- 7.K.S.R College Tiruchengode

Designation, Vice Principal/Professor Cheran Group of Institutions, Coimbatore, Tamilnadu, India. Duration, November, 1-11-2021 to till date Designation , HOD & Professor, Dept of Biotechnology, Vivekananda College of Arts and Science for Women (Autonomous), Tiruchengode, Tamilnadu, India. Duration, May, 2019 to September, 2020.

Designation, Visiting professor, Department of Human Youth Welfare, Madurai Kamaraj University, Madurai. Tamilnadu, India Duration, October, 2016 to March, 2019.

Designation, HOD & Associate Professor, Dept of Biotechnology, Theni College of Arts and Science, Theni.Tamilnadu, India Duration, December, 2015 to August, 2016 .

Designation, Assistant Professor, Dept of Biotechnology, Hindustan College of arts and Science Coimbatore. Tamilnadu, India Duration, January,2015 to September, 2015 .

Designation, Assistant Professor , Dept of Biotechnology, New Horizon College of Engineering Bangalore. Karnataka,India. Duration, August, 2014 to December, 2014.

Designation, HOD &Assistant Professor, Dept of Biotechnology, K.S.R. College of Arts & science, Tiruchengode. September, Tamilnadu India. Duration, 2006 – June, 2011.

Duration, 2000 June, 20

**PUBLICATIONS:** 

Dr. Rammohan Muthukannan et.al., Genomics Association Resolute the Progression of Breast Cancer. World Journal of Pharmaceutical Research, SJIF Impact Factor 8.084 Volume 12, Issue 1, 1155-1172 2023. ISSN 2277-7105.

Dr. Rammohan Muthukannan et.al.,

Developing Nano-pharmaceutical Delivery Systems GIS SCIENCE JOURNAL, ISSN NO: 1869-9391 VOLUME 9, ISSUE 12, 2022.Page No: 1877.

Dr. Rammohan Muthukannan et.al.,

Evaluation of Tridax procumbens Leaves extract on carbon tetra chloride Induced hepatotoxicity on rats. GIS SCIENCE JOURNAL, VOLUME 9, ISSUE 12, 2022, Page No: 1863.

Dr. Rammohan Muthukannan et.al.,

Prevention potential for Doxorubicin cardiotoxicity causes, Diagnosis consequences. GIS SCIENCE JOURNAL, VOLUME 9, ISSUE 12, 2022, PAGE NO: 1856.

Dr. Rammohan Muthukannan et.al.,An ethanol extract of Piliostigma reticulatum leaves exhibits antibacterial. GIS SCIENCE JOURNAL, VOLUME 9, ISSUE 12, 2022, PAGE NO: 1848.

Dr. Rammohan Muthukannan et.al.,

A study on molecular targeted approaches to cancer therapy and the role of chalcones in chemoprevention. ISSN2515-8260 Volume 08, Issue 03, 2021.

European Journal of Molecular & Clinical Medicine (Impact Factor – 8.111).

Dr. Rammohan Muthukannan et.al.,

Isolation and Characterization of antimicrobial compound from MarineStreptomyces hygroscopicusBDUS49. World Journal of Fish and Marine Sciences4(3):268-277-2013. (Impact factor -1.65)

Dr. Rammohan Muthukannan et.al.,

Rapid synthesis and Characterization of Silver Nano Particles from Pseudomonas sp.ram bT-1 "Vol 3, No1, (2011). International Journal of Eco Bio technology (Impact factor-2.1)

Dr. Rammohan Muthukannan et.al.,

Cytotoxic activity of Partially purified 7-demethoxy rapamycin derived from Streptomyces hygrospicus BDUS 49, Int J MedRes.:1(4):198-203. (2011). (Impact factor-1.7).

#### **PAPERS PRESENTED:**

#### International

Paper Presented at AACR - International conference – FLORIDA, USA, Topic: The Influence of functional polymorphisms in UGT1A7 and UGT1A9 on Irinotecan pharmacokinetics in Asian Cancer Patients.

Poster & Paper Presented at International conference at SINGAPORE Topic: Anti mitotic activity of Hela and G2 arrest Mediated by Harmine

International & National Workshop, Conferences

- Responsible care and Laboratory of Animals Course-International workshop at SINGAPORE.
- Effective working Relationships workshop at SINGAPORE.
- Performance Management & Appraisal skills workshop at SINGAPORE
- International Society for Cancer Gene therapy at SINGAPORE
- International conference on Recent advances in Nanotechnology at K.S.R.College, Tiruchengode, India.
- National Workshop on Genome Informatics at, Alagappa University, Karaikudi, Tamilnadu,India.

- National Workshop on Nanotechnology, K.S.R.college, Tamilnadu, India.

Science Day Annual Conferences, Madurai Kamaraj university, India.

Management Sponsored Faculty Development Programme, K.S.R.College, Tiruchengode, India. Advanced Molecular Techniques workshop, K.S.R.College, Tiruchengode, Tamilnadu, India.

Text Books to be published:

1. Animal Cell culture technology

2. Hand Book on Molecular Biology

#### **RESEARCH SUPERVISOR**

Ph.D., Guide for students and External VIVA-VOCE Examiner at Shree sai Institute of Medical Sciences, Bhopal, M.P, India.

M.Phil Guide Number of M. Phil., Scholars Produced: 12

### **INVITED RESOURCE PERSON**

PSG College of Arts and Science – Coimbatore PG - Exam Board Member - Department of Biotechnology.

- 1. Nehru Memorial College, Puthanampatti, Tiruchy (Nano Biotechnology)
- 2. A.P.A. College for Women, Palani. (PCR and SDS PAGE)
- 3. National Conference-Vaccine Technology, Jamal Mohamed College, Trichy. (Breast Cancer vaccine).
- 4. Nirmala College for Women-Coimbatore. (PCR Technology).

#### **Honors:**

1. Best Paper Award at Florida- USA International Conference on Pharmacokinetic Studies of Drug Metabolizing Enzyme Cytochrome P450 SNP Analysis.

2. Best faculty Award at K.S.R College Tiruchengode, Tamilnadu, India.

**Role of Competency :** 

1. Research Head & IQAC Cell Director & NAAC Accreditation

Cherraans College of Pharmacy.

2. Anti-ragging- Executive Member

3. Active involvement of various works assigned by the Management./Principal in-charges/ Coordinators for various cells/like -Placement cell/outreach programs/promote the Rural and Institute activities for the promotion of Institutions names.

- 4. More than 50 number of /Workshop/Conference Organized
- 5. To Monitor the Teaching performance and student satisfaction.
- 6. Over all Co-ordinator for the Association of Inaugural/Fresher's Day/Graduation Day/Annual Day

7. Over all Coordinator for NAAC

8. Especially – Establishment of criterion - IV (Infrastructure Environment sustainability and LearningResources) 9. Over all Coordinator for ISO

10. Research Head for Guiding Master and Ph.D., Scholar and Promote the Paper publication on behalf of Institutional Research Activities

11. Promote the student's skill-based activities for their employment and Identify the Backlog students and implementing the skills and focus separately for their placements.

12. Value Added on course for the purpose of Present and Future

12. To encourage the faculty Development programs to get the Research Funding.

13. Organize the National and International Conference

## *⊘* **REFERENCE** :

1. Dr. R. Paramasivan, Scientist-F

ICMR Indian Council for Medical Research Vector Control Research Centre, Govt of India Field Station, 4, Sarojini street,

Chinna Chokkikulam, Madurai-625 002. Tamil Nadu. India.

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